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having a directivity from a light outputting surface of the at least one light diffusing sheet opposite to the face of the at least one light diffusing sheet, the light outputting surface of the at least one light diffusing sheet being rougher than the face of the at least one light diffusing sheet, the light diffusing sheet shifts the direction of the maximum intensity direction of the second diffused light toward the direction of the normal standing on the light outputting surface of the diffusing sheet by virtue of the rougher light outputting surface, a polarized beam splitting sheet which receives the second diffused light from the light outputting surface of the light diffusing sheet, through which one polarized light component of the second diffused light is transmitted, and on which the other polarized light component is reflected, and a light reflecting sheet which is arranged on the back face of the light conductor and is for reflecting a light into the light conductor, and the liquid crystal panel is arranged at the light outputting surface side of the polarized beam splitting sheet of the back light device.

REMARKS

Claims 1-12 are pending. By this Amendment, claims 1 and 6 are amended.

Reconsideration based on the above amendments and following remarks is respectfully requested.

The attached Appendix includes marked-up copies of each rewritten claim (37 C.F.R. 1.121(c)(ii)).

Entry of this amendment is proper under 37 CFR §1.116 since the Amendment:

(a) places the application in condition for allowance for the reasons discussed herein; (b) does not raise any new issue requiring further search and/or consideration since the amendments amplify issues previously discussed throughout prosecution; (c) does not present any additional claims without canceling a corresponding number of finally rejected claims; and (d) places the application in better form for appeal, should an appeal be necessary. The Amendment is necessary and was not earlier presented because it is made in response to

arguments raised in the final rejection. Entry of this Amendment is thus respectfully requested.

I. The Claims Satisfy all Formal Requirements

The Office Action objects to claim 6 because of informalities. Claim 6 is amended in accordance with the Examiner's suggestions. Withdrawal of the objection to claim 6 is respectfully requested.

II. The Claims Satisfy the Requirements of
35 U.S.C. §112, Second Paragraph

The Office Action rejects claims 1 and 6 under 35 U.S.C. §112, second paragraph, as indefinite. Claims 1 and 6 are amended to obviate the rejection. Withdrawal of the objection under 35 U.S.C. §112, second paragraph, is respectfully requested.

III. The Claims Define Allowable Subject Matter

The Office Action rejects claims 1, 6, 11 and 12 under 35 U.S.C. §103 as unpatentable over Applicant's admitted prior art (hereinafter "the admitted art") in view of U.S. Patent No. 5,418,631 to Tedesco (hereinafter "the 631 patent"); claims 2 and 7 under 35 U.S.C. §103 is unpatentable over the admitted art in view of the 631 patent and further in view of U.S. Patent No. 5,748,369 to Yokota (hereinafter "the 369 patent"); claims 3 and 8 under 35 U.S.C. §103 as unpatentable over the admitted art in view of the 631 patent and further in view of U.S. Patent No. 5,793,456 to Broer et al. (hereinafter "the 456 patent"); claims 1, 4, 6, 9, 11 and 12 under 35 U.S.C. §103 as unpatentable over PCT WO 95/17692 to Ouderkirk et al. (hereinafter "PCT 692") in view of U.S. Patent No. 5,143,433 to Farrell (hereinafter "the 433 patent") and the 631 patent; and claims 5 and 10 under 35 U.S.C. §103 as unpatentable over the admitted art in view of the 631 patent and further in view of U.S. Patent No. 5,870,156 to Heembrock (hereinafter "the 156 patent"). The rejections are respectfully traversed.

In accordance with the claimed invention, a first diffused light having a peak oblique to normal standing on a light outputting surface of the lightconductor is provided. A light diffusing sheet receives this diffused light that has a peak oblique to the normal standing on the light outputting surface of the lightconductor. The light diffusing sheet outputs a second diffused light having a directivity normal standing on the light outputting surface of the diffusing sheet.

However, the 631 patent does not disclose these claimed features. Instead, in the 631 patent, a diffused light provided by a lightconductor already has a peak directed to the normal standing on a light outputting surface of the lightconductor. This is different from the claimed invention wherein the first diffused light is oblique to the normal. Thus, it is impossible to improve the efficiency for using light when the 631 patent lightconductor is combined with the light diffusing sheet of the claimed invention. In other words, since the diffused light provided by the light conductor of the 631 patent already has a normal directivity, there is no need for a light diffusing sheet to change the directivity.

Thus, no motivation exists to combine the 631 patent with the rest of the applied art to make up for the above deficiencies. In fact, the only motivation for such a modification is found in Applicant's own disclosure, and thus constitutes impermissible hindsight reasoning.

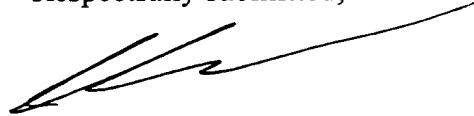
For at least these reasons, it is respectfully submitted that claims 1 and 6 are distinguishable over the applied art. Claims 2-5 and 7-12, which depend from claims 1 and 6, are likewise distinguishable over the applied art for at least the reasons discussed as well as for the additional features they recite. Withdrawal of the rejections under 35 U.S.C. §103 is respectfully requested.

IV. Conclusion

In view of the foregoing remarks, Applicant respectfully submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Eric D. Morehouse
Registration No. 38,565

JAO:EDM/gam

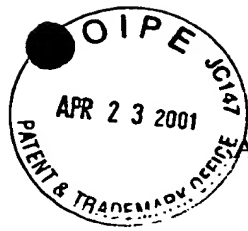
Attachments:

Appendix
Petition for Extension of Time

Date: April 23, 2001

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
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APPENDIX

Changes to Claims:

The following are marked-up versions of the amended claims:

1. (~~Four~~Three Times Amended) A back light device comprising:

a light source;

a lightconductor in a substantial plate form comprising a front face, a back face and side end faces,

light radiated from the light source and made incident on the one of the side end faces being output as a first diffused light having a peak oblique to the normal standing on directivity from a light outputting surface therefrom which is the front face;

at least one light diffusing sheet for receiving, on its face, the first diffused light output from the light outputting surface of the lightconductor, and outputting a second diffused light having a directivity from a light outputting surface of the diffusing sheet opposite to the face of the diffusing sheet, the light outputting surface of the light diffusing sheet being rougher than the face of the at least one light diffusing sheet, the light diffusing sheet shifts the direction of the maximum intensity of the second diffused light toward the direction of the normal standing on the light outputting surface of the diffusing sheet by virtue of the rougher light outputting surface;

a polarized beam splitting sheet which receives the second diffused light from the light outputting surface of the light diffusing sheet, through which one polarized light component of the second diffused light is transmitted, and on which the other polarized light component is reflected; and

a light reflecting sheet which is arranged on the back face of the lightconductor and is for reflecting a light into the lightconductor.

6. (~~Four~~Three Times Amended) A back light device for a liquid crystal display apparatus comprising the back light device and a liquid crystal panel, wherein the back light device comprising a light source, a lightconductor in a substantial plate form comprising a front face, a back face and side end faces, light radiated from the light source and made incident on the one of the end side faces being output as a first diffused light having a peak oblique to the normal standing on~~directivity from~~ a light outputting surface therefrom which is the front face, at least one light diffusing sheet for receiving, on its face, the first diffused light output from the light outputting surface of the lightconductor, and outputting a second diffused light, having a directivity from a light outputting surface of the at least one light diffusing sheet opposite to the face of the at least one light diffusing sheet, the light outputting surface of the at least one light diffusing sheet being rougher than the face of the at least one light diffusing sheet, the light diffusing sheet shifts the direction of the maximum intensity direction of the second diffused light toward the direction of the normal standing on the light outputting surface of the diffusing sheet by virtue of the rougher light outputting surface, a polarized beam splitting sheet which receives the second diffused light from the light outputting surface of the light diffusing sheet, through which one polarized light component of the second diffused light is transmitted, and on which the other polarized light component is reflected, and a light reflecting sheet which is arranged on the back face of the lightconductor and is for reflecting a light into the lightconductor, and the liquid crystal panel is arranged at the light outputting surface side of the polarized beam splitting sheet of the back light device.